Before the Commission
Federal Communications Commission
Washington, D.C. 20554

In the matter of

Amendment of Part 90 of the Commission's
Rules to Facilitate Future Development of
SMR Systems in the 800 MHz Frequency Band
Implementation of Sections 3(n) and 322 of
the Commissions Act -- Regulatory
Treatment of Mobile Services
Implementation of Section 309(j) of the
Communications Act -- Competitive Bidding

PR Docket No. 94-144
RM-8117, RM-8030
RM-8029

Physical RM

#### Partition for Reconsideration

## Introduction

Genesee Business Radio Systems, Inc. (Genesee) is a small business that sells, services and rents dispatch radio equipment in the 450 MHz and 800 MHz frequency bands. Genesee sells and services over 100 SMR users operating with over 1000 radios which use the 800 MHz SMR repeater systems operating in the Rochester, New York area.

Our location is within the Canadian border area (Region 2) which limits our available SMR channels from 280 channels to 60 channels in the 800 MHz band due to the close proximity of Toronto, Canada, and our channels are not contiguous.

We do not agree with the FCC approach to auction the 800 MHz spectrum of the upper 200 SMR channels in order that the business plan of one bidder needs and can obtain contiguous frequencies as a result of this auction.

## C. Relocation of Incumbents for the Upper 200 Channels

## 1. Comparable facilitates

Comparable facilities must extend consideration for the incumbent in that the original FCC licenses of the upper 200 channels were granted with 450 kHz spacing between channels so that a five (5) channel SMR system could be operated with a RF transmitter/receiver combiner into one antenna system. The incumbent can not use contiguous spectrum, and should not be compelled to bid for contiguous spectrum.

The FCC is permitting the EA licensee to offer under the mandatory period the possibly of the retuning channels all bunched together at one end of the upper 200 channels for the incumbent, so that the EA licensee who wants contiguous frequencies will have their channels contiguously at the other end of the upper 200 channels.

The retuning by the incumbent surely will be a difficult, if not an impossible situation, to have a new radio system with very close frequencies such that a ten (10) channel SMR system could now require five (5) antennas and RF coaxial cables for the SMR repeater equipment, rather than a one (1) or two (2) antenna system. The FCC will be causing the present SMR repeater service to be much more costly to the user.

An example of the standard five (5) channel SMR system would be Channels 528, 546, 564, 582 and 600 on frequencies 864.1875, 864.6375, 865.0875, 865.5375 and 865.9875 MHz, all at 450 kHz spacing. A five (5) channel RF transmitter combiner would have a typical insertion loss of four (4) dB, such that a 60 watt RF transmitter would have 24 watts into the antenna coax system.

Current technology will permit RF transmitter combiners to have a minimum spacing of 250 kHz between channels, better than the original 450 kHz spacing. So, another set of five (5) channel SMR system could be Channels 519, 537, 555, 573 and 591 that would be interleaved between the above system at 225 kHz spacing with slightly higher RF transmitter combiner insertion loss of six (6) dB and could work into one antenna (60 watts transmitter down to 15 watts out of combiner) for a 10 channel SMR system, keeping the charge for repeater service more reasonable to the user. With fewer antennas on a tower or structure means less resistance to wind and ice storms that could cause a tower to collapse.

If a EA licensee wants contiguous spectrum for their digital radio system technology, they will try to offer to the incumbent during the mandatory period all the retuning channels bunched together with very close spacing at one end of the upper 200 channel spectrum which will surely require the incumbent to have many more antennas on the tower. The newly bunched channels for the incumbent with very close spacing at less than 250 kHz separation between transmitters will also surely have a more costly and higher power transmitter, a higher insertion on the order of ten (10) dB loss of 800 MHz transmitter combiner resulting less RF power (60 watts down to 6 watts) to antenna that will reduce the coverage area or require more antennas and even larger antennas of the tower or structure. The RF transmitter combiner has a maximum RF transmitter power limit of 150 watts into the combiner.

The current 800 MHz technology for minimum channel spacing for RF transmitter combining is minimum 250 kHz of channel spacing. The FCC in this 2nd Report & Order has not provided sufficient protection of excessive RF combiner insertion loss and higher antenna rental cost to the incumbent in mandatory retuning when the EA licensee will probably offer very close frequencies for the replacement RF transmitter combiners in the new retuned SMR system.

Comparable facilities in order to be transparent to the end user during the retuning may require the EA licensee to provide a second office radio during the mandatory retuning. The retuning can take several weeks and also may require second remote controls by the user for other places of radio dispatch to operate transparent to the fullest extent.

The FCC has provided no compensation to the user for an interruption by vehicle radio units out of service when the radio must go to the shop for realignment and re-tuning to the new frequencies.

#### d. Operating Costs

The FCC is not reasonable to require that a EA licensee has only five (5) years of extra costs for antenna space rental when the SMR system will surely operate for 20 years or more. In many cases, additional antenna space at the existing site for the incumbent may not be available above the present antennas. Prime antenna site rental can cost \$200/month for the space of each antenna foot mounted on the tower, such that a 14 foot antenna will be charged \$2800/month.

If the FCC does not limit the frequency spacing of the channels to 250 kHz during the mandatory retuning, a ten (10) channel SMR system that operates now on one or two antennas may require five (5) antennas that will have a significant cost increase for repeater service to the user after the five (5) year period. Therefore, four (4) additional antennas (if possible) would increase the operating cost for the incumbent to \$11,200/monthly or \$134,400/annually. The FCC will be making the user pay increased charges from the 6th year to 20th year to the benefit of the EA licensee.

#### e. Compensation Costs

Our comment about overtime expenses in the original Comments to the 1st Report and Order for retuning was based on our user preferences to not permit vehicles out of service during the daily operation of their business, such that user vehicles for retuning would be made only available at nights or weekends after regular user business hours.

We ask that the FCC reconsider this user requirement in order to offer transparent radio communications during the mandatory retuning period.

One of our associates with 1800 radios on their SMR system, wrote a letter to each user to request a scheduled retuning to add new channels for their radio fleet. Many of their users will not permit retuning, even at no cost to them, saying that they do not need it and are not interested. In 18 months, only 70 percent of the users have been voluntarily retuned to add the additional channels which should increase the quality of repeater service for the user by reducing the congestion of radio traffic.

How will the FCC compel the user to comply in the mandatory retuning without any incentive for the user even with the cooperative effort of the incumbent to the EA licensee?

# In Conclusion:

We ask that the FCC give reconsideration to our above points and amend this Second Report and Order for the auction of the upper 800MHz SMR channels because the additional information and facts are likely to be not in the best interest of the user and incumbent.

Submitted by:

Duncan C. Kennedy III, President

Genesee Business Radio Systems, Inc.

992 Carter Street

Rochester, New York 14621